

REMARKS

The objections, rejections and comments of the Examiner set forth in the Office Action dated August 8, 2003 have been carefully reviewed by the Applicant. Claims 11-20 are currently pending in the application.

The numbering of the claims has been objected to. As indicated by the Examiner, misnumbered claims 15-19 are correctly numbered as claims 16-20. In response, the correctly numbered claims are shown in the attached listing of claims 11-20.

Claim 11 is objected to for reciting "the scanning system." In response, "scanning" has been replaced with "image capture," in accordance with the direction of the Examiner.

Claim 20 is objected to for the grammatical error "a an". In response, "a" has been deleted in accordance with the direction of the Examiner.

Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps. Claim 11 is held to be indefinite because there is no relationship between the operational data that was retrieved and how the data is to be used in the method for performing a calibration. Claims 12-20 are rejected by virtue of their dependency. In response, Claim 11 has been amended to clearly provide a relationship between the retrieved data and the method for performing a calibration.

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Specifically, Claim 11 has been amended to recite "comparing the retrieved operational data to data from an operational sensor of the image capture system." The retrieval of stored operational data and the comparison the data from an operational sensor is described in the specification at page 15, lines 3-10.

Claims 11, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blitz et al. (USA 5170267) in view of Stoffel (US 4404597). In response, the Applicant has amended independent Claim 11 to patentably distinguish the claimed invention from the proposed combination of Blitz and Stoffel. The Applicant also respectfully submits that the proposed combination of Blitz and Stoffel would change a fundamental principle of operation of Blitz, and thus would not be obvious to one with normal skill in the art.

As noted in the rejection, Blitz teaches a main memory having plural hard disks for storing machine operating system software, machine operating data, and the scanned image data currently being processed (col., 3, lines 40-45). Blitz further teaches a method of calibration using the main memory 56 and processor 34 (shown in Fig. 2).

The rejection holds that Stoffel teaches "operational data restricted to data from previous scans and calibrations for adjusting an operation condition," at col. 3, lines 23-30:

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To accommodate variations in illumination intensity, an intensity calibration is run prior to scanner operation utilizing a suitable test pattern or document which is typically white. The results are committed to memory and as scanning of the document image takes place, the calibration data is withdrawn from memory and used to modify the image signal levels output by the scanning array 15.

The calibration data referred to by Stoffel is not from a past calibration, but from the current calibration. As described by Stoffel, calibrations scans may be made on the X-axis and the Y-axis, with data being stored in RAM memory. The RAM memory is coupled by a bus to digital-to-analog converters control the illumination circuits. Only the current calibration data is stored in RAM, with old calibration data being overwritten when a new calibration is performed. In the context of Stoffel, there is only a current calibration. Although Stoffel discusses "calibration scans," the scans belong to a single calibration and are run on the X and Y axes. In contrast, Claim 11 recites the comparison of past (retrieved) and current (from the sensor) operational data. Stoffel does not compare past data with present data, but overwrites past data with current data.

It should be noted that the RAM memory of Stoffel is dedicated to storing data derived from optical sensors and is not coupled to a processor such as that described by Blitz. The architecture taught by Blitz is that of a processor coupled to a number of hard drives that serve as a general purpose memory. In contrast, the architecture taught by Stoffel is directed to a dedicated RAM memory coupled to digital-to-analog converters (DACs), with the data not being accessible by a processor. Replacing the processor and

teaches a method of calibration using the main memory 56 and processor 34 (shown in Fig. 2).

The rejection holds that Stoffel teaches "operational data restricted to data from previous scans and calibrations for adjusting an operation condition," at col. 3, lines 23-30:

To accommodate variations in illumination intensity, an intensity calibration is run prior to scanner operation utilizing a suitable test pattern or document which is typically white. The results are committed to memory and as scanning of the document image takes place, the calibration data is withdrawn from memory and used to modify the image signal levels output by the scanning array 15.

The calibration data referred to by Stoffel is not from a past calibration, but from the current calibration. As described by Stoffel, calibrations scans may be made on the X-axis and the Y-axis, with data being stored in RAM memory. The RAM memory is coupled by a bus to digital-to-analog converters control the illumination circuits. Only the current calibration data is stored in RAM, with old calibration data being overwritten when a new calibration is performed. In the context of Stoffel, there is only a current calibration. Although Stoffel discusses "calibration scans," the scans belong to a single calibration and are run on the X and Y axes. In contrast, Claim 11 recites the comparison of past (retrieved) and current (from the sensor)

operational data. Stoffel does not compare past data with present data, but overwrites past data with current data.

It should be noted that the RAM memory of Stoffel is dedicated to storing data derived from optical sensors and is not coupled to a processor such as that described by Blitz. The architecture taught by Blitz is that of a processor coupled to a number of hard drives that serve as a general purpose memory. In contrast, the architecture taught by Stoffel is directed to a dedicated RAM memory coupled to digital-to-analog converters (DACs), with the data not being accessible by a processor. Replacing the processor and hard drives of Blitz with the RAM and DACs of Stoffel would change a fundamental principle of operation of Blitz.

Since the proposed combination of Blitz and Stoffel fails to teach the comparison of retrieved operational data and data from an operational sensor, independent Claim 11 and dependent Claims 12-20 are patentably distinguished from the proposed combination of Blitz and Stoffel. Further, because of the fundamental change required in the architecture of Blitz, the proposed combination of Blitz and Stoffel would not be obvious to one with normal skill in the art.

In summary, Applicant asserts that Claims 11-20 are in condition for allowance and earnestly solicits such action by the Examiner.

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Respectfully submitted,

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